# Monthly Correspondent,

&c. &c.

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Vol. I.

#### ASTRONOMICAL OBSERVATIONS FOR APRIL.

We are able to trace the origin of the calendar from Romulus, the founder of Rome; but it has undergone various reformations since his time, of which it will be the business of this article to give a brief account.—Romulus distributed time into several periods, for the use of those under his command: he observed, with as much accuracy as the knowledge of the times would admit, the recurrence of the seasons, and divided the year into ten months, making the first in the spring and on the first of March. He suspected that the Sun run its course in 304 days, and the months of this legislator were not at first equally divided; some of them consisted of only twenty days, and some had thirty-five, or perhaps forty days; but afterwards he made four of his months to consist of thirty-one days, and the other six of thirty days, making 304 days.

The calendar of Romulus was reformed by Numa, who made it consist of 355 days, and transferred the beginning of the year from March to January, reckoning March the second month, April the third, and placing February, which even then consisted of only 28 days, at the end of the calendar. The year thus arranged remained undisturbed, till the year 452 before Christ, when the Decemvirs changed the order of the months, reckoning them in the same manner that they are now found in the almanack, viz. January, February, March, April, &c.

NO. IV.

As the real length of the year had not yet been ascertained, great disorders were occasioned in its constitution, which Julius Cæsar, with the advice and consent of Sosigenes. a celebrated mathematician, undertook to rectify about the vear B. C. 46. He found that the months had considerably receded from the seasons, to which they had been adjusted by Numa, and that the dispensation of time in the calendar. could never be properly settled, without having a regard to the annual course of the Sun. To bring forward the months to their proper places, he took an account of the days which had been lost by the former mode of reckoning, and formed a year of 15 months, or 445 days, which on account of its quantity and design, has been called the year of confusion. This year being ended, the Julian year commenced on the first of January, B. C. 46. From this time, the civil year and months, were regulated by the course of the Sun. As the philosopher found the annual course of the Sun to consist of 365 days 6 hours, he made his year to consist of 365 days, for three years successively, and every fourth year of 366 days, in order to comprehend the odd six hours. this purpose he ordained, that an intercalary day, should be added every fourth year to the 23d of February; that is the 24th day, or the 6th, of the calends of March, which was to be reckoned twice, and hence this year was denominated Bissextile. It is likewise called Leap Year, from the year leaping over a day more of time in that year, than in a common year. Hence the Julian Calendar, so called from Julius Cæsar, is disposed into periods of four years each, of which the first three are called common, and consist of 365 days, and the fourth bissextile, having 366 days.

The Julian year was still imperfect; for as the time in which the sun apparently performs his annual revolution, that is the time in which the earth actually makes his journey round that luminary is 365 days, 5 hours, 45 min. and 48 sec. the civil year of 365 days 6 hours, must have exceeded the solar year by 11 minutes 12 seconds, which in the space of

130 years amounted to a whole day. The imperfections of the Julian Calendar were not observed for several hundred years, and it was not until the year 1582, that the next reformation was effected; the error accumulated by this means, amounted to about ten days of that time, so that the vernal equinox, which had been fixed by Sosigenes, in the time of Julius Cæsar, on the 25th of March, was at the time of the Council of Nice, held in the year 325, fixed on the 21st of March, and in the year 1532, it was found to happen on the 11th. This constant anticipation of the equinox, became a matter of serious complaint in the 15th century; and in 1474 Pope Sextus IV. being convinced of the necessity of a reformation, sent for Regiomontanus, a celebrated mathematician, and presented him with the archbishopric of Ratisbon, in order to engage him in the undertaking. But a premature death preventing him from the accomplishment of his design, the project was suspended for a whole century. It was now that pope Gregory XIII. had the honour of executing, what several preceding pontiffs and councils had attempted before in vain. He invited to Rome a considerable number of mathematicians and astronomers, employed ten years in the examination of their several formule, and finally gave the preference to the plan proposed, by Aloisius and Antonius Lilius, two brothers of Verona. He transmitted copies of this plan in 1577, to all the catholic states, and the learned academies at that time existing. A council of the most erudite prelates was convened by the pope, and the subject being finally settled, a brief was published in the month of March A. D. 1582, by which the use of the old calendar was entirely abrogated in all countries, over which his holiness had any sway, and the new one instituted in its stead, called from his name the Gregorian Calendar.

The principle adopted was, that the few days which had been gained by the old account should be taken from the month of October, of the year then current, and the equinox brought back to the 21st of March, as it had been settled by the council of Nice; and to prevent the future recurrence of a similar variation, it was ordained, that instead of making every hundredth year bissextile, as was the case before, every four-hundreth year only should be considered as bissextile, and the rest as common years. The length of the solar year, and the time of the vernal equinox, were, by these means, very accurately settled: for as a day was gained, by the former mode of reckoning, in every interval of 130 years, this was nearly equivalent to the gain of three days in every 400 years; and, consequently, by making the years 1700, 1800, 1900, to be common years, instead of leap-years, the error arising from the odd time would be properly corrected; so that the new mode of reckoning cannot vary a single day from true time in less than 5000 years.

When the pope had reformed this calendar, he ordered all the ecclesiastics under his jurisdiction to conform to this. new mode of reckoning; and exhorted Christian princes every where to adopt it in their dominions. Hence it was immediately introduced into almost all catholic countries. The catholic states in Germany adopted it; but those that were of the reformed faith rejected it. Hence arose a difference of 10 days between the methods of reckoning afterwards used in eatholie and protestant countries. In the year 1700, the reformation of the calendar was introduced into the protestant states of Germany, and also into Denmark. In Sweden it did not exist till March 1753. In this country, an act of parliament was passed to cancel eleven days out of the month of September; because, as 170 days had elapsed since the Gregorian alteration had taken place, the old-style had consequently gained more than a day upon the course of the Sun than it had done at a former period. The old style then in Great Britain, and all its dependencies, ceased on the 2d of September, 1752, and the next day, instead of being the 3d, was called the 14th. By the same act the beginning of

the year was changed from the 25th of March to the 1st of January.

A considerable difficulty still remained, which was to make the lunar year agree with the solar one, and in settling the true time for the observance of Easter, and the other move-It had been ordered by the council of Nice. that Easter should be celebrated upon the first Sunday after the first Full Moon, following the vernal equinox. And, in order to the due observance of this rule, it became necessary to know when the Full Moons would happen in the course of every year. Now the revolutions of the Sun and Moon are not very obviously commensurate, the solar year containing twelve lunations, and about eleven days; but it had been discovered by Meto 2000 years ago, that nineteen solar years contain exactly 235 lunations; and this determination is so very accurate, that it makes the lunar month only half a minute too long. Hence, it happens, that in every period of nineteen years the Moon's age is the same on the same day of the year. The number of the year in the Metonic circle is called the Golden Number, the calendar of Meto having been ordered, at the celebration of the Olympic games, to be engraved in letters of gold on a pillar of marble. At present, if we add 1 to the number of the year and divide by 19, the remainder will be the golden number: thus, for 1814,  $\frac{1814+1}{19} = \frac{1815}{19} = 95$ , and 10 over as a remainder, which remainder 10 is the golden number.

If we subtract 1 from the golden number, then multiply by 11 and divide by 30, the remainder will be the *epast*, which is the Moon's age on the 1st of January: thus, for 1814, we have  $9(10-1) \times \frac{11}{30} = \frac{99}{30} = 3$  and 9 over, which 9, as a remainder, is the *epact*. The application of these numbers will be shewn in a future number of this work.

j.

The time of the Sun rising and setting in London during the month of April, is as follows, viz:—

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1st. Sun rises 34m. past 5. Sun sets 26m. past 6.

11th. — — 14m. — 5. — — 46m. — 6.

21st. — — 55m. — 4. — — 5m. — 7.
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Equation of Time. [See the month of January.]

The following table will shew what is to be added to and what is to be subtracted from the apparent time shewn on the dial, to obtain equal or true time for every 5th day of April.—

The Moon will be at full at 29m. past 8 in the afternoon of the 4th; it enters its last quarter, on the 12th, at 28m. past 9: the change or new moon, is at 55m. past 7 on the 20th, and it enters its last quarter at 6m. past midnight, on the 26th.

The time of the Moon's rising for the first five days after she is full, as follows, viz.

Venus will be stationary on the 3d, Mercury on the 15th, and Jupiter on the 27th. The Sun enters the sign Taurus 11m. past 6 in the evening of the 20th. On the 26th, of this month, the moon will eclipse the star  $\delta$  5. The immersion will occur at 25m. past 12 at night, and the emersion at 18m. after 1 the next morning, the star passing under the moon's centre. On the 1st, there will be an obscuration of

the star A  $\otimes$ , by the planet Mars, the star being 18m. north of the centre of that planet, and on the 8th, the same planet will pass over  $2 \times 0$ , 29m south.

The greatest elongation of Mercury, will be on the 30th, and the inferior conjunction at 4 o'clock in the afternoon of the 2nd. At 6 in the morning of the 20th, the planet Saturn will be in its quadrature, that is, three signs distant from the sun.

In the eclipses of the first satellite of Jupiter, that will be visible in London this month, the emersions at the following times, viz. on the

7th day at		3m.	past	10	in the	evening.
14th	_	57		11	_	
22d		52		1		morning
23d		20		8	_	evening.
30th		15		10	-	_

## To the Editor of the Monthly Correspondent.

SIR, London, March 7, 1814.

THE ready insertion you gave my letter with the Princess Charlotte of Wales's nativity, claims my thanks; and with the exception of two or three typographical errors, the mode in which it is introduced, is such as to merit my approbation.

I hasten to redeem my pledge to you, by informing you that the study of starry science has engaged my leisure hours for twelve years past; I flatter myself from the application I have afforded it, in connection with the facilities of planispheric calculations, that I am tolerably conversant with its *true principles* as perfected by the ancients, and developed in the quadripartite of that prince of the art, the illustrious Ptolemy.

From the closest attention to what he recommends, both in generals and particulars, in the real elucidation of the

heavenly influences, I am fully impressed with these great truths, that whoever deviates from his rules is pursuing error; and that those who have founded opinions on a practice subsequent to his have been very little better than imposters.

It would not be difficult to go into the detail of those absurdities; at present however it will suffice to observe, that of all the nativities of living persons of elevated rank that have been published for some years past, scarcely more than one has resulted a single happy prediction, which could in truth be termed the genuine offspring of astrological science.

This, Sir, may appear to you very extraordinary; but your surprise will cease, when I state, that added to the folly mentioned of founding calculations on spurious principles, the artists appear to have suffered their prejudices and political sentiments to bias their astrological decisions!

In the name of common sense, what other results could have been anticipated? surely none; for if men blindly reject the testimony of ages, and the united experience of the collective wisdom of antiquity, and prefer the conjurations of jugglers, and their own half-witted reveries, the end must be disappointment and disgrace.

I do however assure you, that the contempt attached to such vile professors would give me great pleasure, were it not that the science itself shares the obloquy, and participates with them in one common infamy. Mark this dreadful consequence, Sir; and regret with me, that folly and fraud should produce so deplorable a catastrophe.

The lovers of legitimate science, those who delight to contemplate the portentous physiognomy of the skies, with those who nightly watch the spheres in their round of harmonic influence, and obtain wisdom by observing the heavens, will rejoice with me at the opportunity now afforded for rendering astrology what it was, when even princes, philosophers, and poets, were found amongst its most

ardent admirers; and when the highest intellectual endowments comprised an acquaintance with its details.

The appearance of the Monthly Correspondent will, I trust, be hailed as the harbinger of truth, and as the precursor of regenerated science; it will be the polar star of the inquiring student, to light him into the haven of his hopes, and as a future security against the tempest raised by ignorance, and perpetuated by malice.—

- " Like some fair lamp, whose solitary light
- " Streams from a watch-tower through the gloom of night,
- " And shines secure, tho' raging waves surround,
- " Its splendours beaming o'er the dark profound !"

I earnestly hope, Sir, that your appeal to the curious and scientific will not be made in vain: I dwell with real pleasure on the anticipation of seeing arrayed under your banners a formidable phalanx of ingenuity and talent, in defence of that sublime speculation, which lifts man to the divinity, and places him on the loftiest pinnacle of mental grandeur.

I alluded to an exception among the failures I have just mentioned, on which, with your leave, I will now offer some observations.—

In September, 1812, a calculation of the nativity of the present ruler of France, called *Destiny of Europe*, made its appearance. This pamphlet I purchased; and confess that I felt highly gratified in observing, that the predictions of the ultimate discomfiture of Buonaparte in his wanton invasion of Russia, together with his subsequent ill fortune, and some other curious general scientific opinions, were most correctly founded on true Ptolomean principles.

It may be recollected that at the time mentioned, the tyrant of Europe had fought his way through an ocean of blood and flames into the heart of Russia, and that her submission was confidently looked for, as the final seal to human slavery, the best informed persons anticipated the worst

results; and I have now great reason to think, that few, unaided by astrological lights, expected any thing favourable to the cause of suffering humanity in the sanguinary contest that then took place, much less did they foresee the further disasters the dire oppressor of nations has since that experienced.

The success of this astrological effort speaks volumes in support of what I have advanced, and completely demonstrates, that if the time of birth is correct (and when it is so it most admirably elucidates general fortune, as well as particular events), a skilful artist, who rightly appreciates the precepts of Ptolemy, by framing his predictions in conformity to them, will infallibly unfold to view the events of futurity, and show to an astonished and admiring world, that the contents of the book of fate are not so difficult to display, and that an astrology in the heavens does really exist, founded on that sublime philosophy, which establishes the beautiful gradations of being, and the sympathies of existing natures.

But to return to the publication as the best illustration of its value, I send you the following extracts, relating to the events that have lately taken place, with the mention of those particulars, as they succeed the predictions; and I do this, because I have reason to think the calculation was not very widely criculated, and that through the medium of your valuable miscellany, some interesting portions of its matter may be generally known.

Page 27.—" Near 43y. 3m. the Moon arrives at the opposition of Mars in mundo, and at 43y. 6m. the Sun reaches his own semiquartile in the zodiac. These are of bad import, and will produce discomfiture and disgrace; much vexation, a very harassing time, and his person will be in danger, an unfortunate period for brothers, &c."

Buonaparte's disastrous retreat from Moscow took place at this time; a plot was formed against his person and authority at Paris; besides the narrow escapes he had from the cossacks in Russia; three of his brothers were fugitives, and another under his severe displeasure.

Page 28.—" About forty-four years the Moon reaches her own semi-square in the zodiac, and receives the sesquiquadrate of Mercury converse; and nearly at the same time the ascendant meets the ses-quiquadrate of Georgium Sidus.

"In the order of things they must have an injurious operation; his travelling will be dangerous and full of hardships; his affairs will not prosper, either at home or abroad; and many untoward events in war he must inevitably encounter; great domestic unhappiness, with danger to relations."

At this period his fortunes were shipwrecked around Dresden and at Leipsic; few could encounter more hardships and greater dangers, and escape unhurt—at home and abroad all went wrong; his empress was consumed by chagrin and wounded feelings; he was at issue with nearly all his relatives; and many of them had their persons exposed to great hazard, as the official reports of the war all testify.

Page 29.—"The part of fortune to the trine of the Moon, about 44y. 6m. will increase his substance, but not in an honourable way."

The illustration of this is most appositely found in the plunder of Hamburgh by the execrable Davoust, and the intolerable impositions levied (near this time) on the French people by his imperial mandates.

My next extracts will have a prospective operation.

Page 12.—Speaking of the quality of death, he says, "There will be no external marks of violence about his person after death; and that, though by some means prescribed either by accident or design, his death may be hastened, yet, to all intents and purposes, it will be deemed a natural one."

Page 20.—On the durability of his greatness, he says, "I think he will always be a sovereign, though not so great as he is now; the sphere of his kingly power being restricted and confined."

Page 29.—"When forty-five the Moon arrives at the trine of Jupiter in the zodiac, and the Sun soon after, by converse motion, is in conjunction with Venus; these directions are good, and I think will dispose his mind to peace, as a means of securing what he has obtained. I am of opinion the early part of his forty-sixth year will produce it, if not a little sooner \*."

At the time of writing this there is every appearance of a near approaching peace, and the preservation of the imperial purple in Buonaparte's person, conformable to the extracts given. My opinion, Sir, coincides with this author generally; and, to close this long letter, I beg to say, that from an attentive contemplation of Napoleon's scheme of birth I infer as follows:—That he will, during his life, be a sovereign! That a Peace with him will take place in this year, 1814! And, that Paris will not suffer injury!

I am, Sir, yours, &c.

J. W. P.

P. S. The accompanying lines, if you think them worth insertion, may follow this letter.

### LINES ON THE NATIVITY OF LORD NELSON.

SEE potent Mars the eastern verge ascend,
Nelson's proud guide, and Albion's faithful friend.
See, as the God unerring darts his fire
Midst loudest thunder, Britain's foes expire:
With vengeful ire, one ruin spread around,
And distant nations hear the conq'ring sound.

Somewhat before the completion of his forty fifth year, which will be in August next.

Hail, mighty orb! thou lord supreme of war, Immortal Nelson's dread-presiding star: Firm in thy dignities, thy warlike ray Led his high soul through fiercest battle's swav. Thy sov'reign rule his destiny defin'd. And gave the noble ardour of his mind: Gave boundless enterprise, with matchless skill, And bade success attend his daring will:-Foe after foe to one black ruin hurl'd. And stamp'd him ruler of the wat'ry world! See gracious Jove \* on wealth's auspicious bound, In happiest form with Sol and Luna's found; Enthron'd he sits, and in refulgent stream. His rays benign to the meridian gleam: Such beams divine, eternal glories show, And honour's richest tides unceasing flow. But see the ruler + of the mental spheres, As on his throne the pow'rful star appears; Where from his orb the intellectual rays Rush in a flood of one prodigious blaze! For Hermes 1 meets concordant all his power, And bounteous Jove receives the kindly shower; Hail happy fruits in Nelson's lofty soul, The great and good were seen to form the whole. Then, on the cusp of glory's proud domain, View Luna spreading wide her silver train, Hast'ning to beauty's queen in fair array, She shares the honours of the God of day: Who moves majestic through the equal sign §. Where Hermes, Jove, and Saturn's beams combine, Sheds a bright lustre on the ascending star. And bids him rise invincible in war;

<sup>\*</sup> Jupiter is near the cusp of the second house.

<sup>†</sup> Saturn, who, according to the sublime philosophy of the ancients, is said to ride on guards of mental fire!

<sup>1</sup> Mercury.

For conq'ring Nelson, in success array'd,
Felt all the power of fam'd Apollo's || aid.
Hail, king of light! his race and thine were one,
His rise like thine—his fall the setting Sun.

J. W. P.

To the Editors of the Monthly Correspondent.

DEAR SIRS,

Feb. 20, 1814.

THE inclosed lines I wish inserted, addressed to Mr. Thomas Taylor, the celebrated Platonist, as under.

I am, Sirs, yours, &c. W. Puckle.

LINES ADDRESSED TO MR. T. TAYLOR,
ON READING HIS ERUDITE TRANSLATIONS OF THE DIVINE WORKS
OF PLATO AND ARISTOTLE,

BY J. W. PUCKLE.

O sage sublime! in ancient lore profound, Whose mind pervades the universe around; Whose Genius soars through all the realms of space, And whose keen sight can such dark myst'ry trace. Oh! that like thee, I Wisdom's page could scan, Fraught with fair science, which ennobles man; Pursue the paths of Truth and Virtue dear, Philosophy my aid, and guide to steer, Through all the devious tracks of erring life, Through disappointments and vexatious strife. What energy of thought, and matchless mind, Breathe through thy writings, with a skill refin'd; There, mid the rays of Science, Genius rears Her head aloft, and lovely she appears, Clad in the mantle of a Soul divine, She seems a Proclus's in every line;

There too with spotless Truth, she's seen array'd, And robed in Light, illumines ev'ry shade, Like *Phæbus* bright with strength and glory crown'd, With energy she darts her beams around: And misty ignorance, dissipating wide, Unveils fair Reason, nature's Joy and Pride; Like *Phæbus* too, when hastening on his race, She's seen alone, no other light has place; And clouds dispelling mid a radiant blaze. Her peerless charms enrapture and amaze! Such is thy Genius, may the lot be mine, To bend with rev'rence at its sacred shrine; To draw from Fountains of immortal fame. Plato's Philosophy and virtuous name; To learn how Wisdom, perfect, unconfin'd, Creation vast, in ancient days defin'd; To trace through parts the harmony of wholes, See the gradation of superior souls: To watch the circling spheres in beauty's round, To view the gods in nature's order found: To learn that these, in bright succession spring From heaven's allwise, supreme, Almighty King! The vast, the eternal mind's creative power, In goodness energizing every hour; One mighty centre giving life to all, From space's confines to this earthly ball; The good the one, the parent of all things, Whose praises every orb in motion sings; And mid his progeny, deific powers, Beneficence through nature ever showers: Such may I view through ancient sages hore, Beauty and order every where explore. O genius! pregnant with immortal fire, That sweep'st, with hallowed hand, Apollo's lyre; At once the glory and peculiar grace Of this base, selfish, and degen'rate race,

Be it my task till life has ceased to flow,

To hail thy name with rapture's strongest glow;

To gather knowledge from thy sacred page,

Teeming prolific, in a barren age;

With truths sublime, on sure foundations laid,

To universal man imparting aid.

O! may the fates, thus kindly deal with me,

Only to know philosophy and thee:

And when the soul from body wings its way

To the bright regions of perpetual day;

There to watch Virtue, Wisdom, and thy course—

To taste of bliss nectarian from its source.

#### ON THE MOCN.

[Continued from page 102.]

It is farther to be observed, that those inhabitants of the Moon, which are placed about the middle of the surface, or face, next us, about Mount Olympus and the Adriatic sea, will constantly see our Earth over their heads, and increasing and decreasing in light, like as the Moon itself appears to us. Those who are situated near the borders, whether on the right or left, or upon the top or bottom, will also constantly have the same appearance in the opposite part of the horizon. But those who live on the side of the Moon, which is not presented to us, will know nothing of our Earth; or, at least, they will never have an opportunity of seeing this large and wonderful Moon (as it will appear to the inhabitants there, who can see it) without travelling perhaps more than 1500 of our miles on the surface of that luminary. To those who do live on this side of the Moon, or travel to it upon any account, as we may pass from the northern into the. southern hemisphere of our globe, the Earth, indeed, when at full to them, will appear to be almost four times the breadth that the Moon does to us, and to communicate about fifteen times as much light to her as she does to us

when at the full. It is this very reflection from the Earth which occasions that dusky light, which may frequently be seen for some days near the change in the body of the Moon, though not then enlightened by an immediate reflection of the Sun's rays after infringing on the Earth.

I have said, that the same face of the Moon is constantly turned towards the Earth: which is in a great measure true, though not strictly so. The motion of the Moon round the Earth, on account of the great eccentricity of her orbit, is very unequal, whilst that round her axis is steady and uniform. By the latter, she constantly turns her face towards us; by the former, the surface is turned from us. As one or the other of those exceeds, it will cause a variation in these appearances, according to the difference, either in excess or defect, of one or the other. Both the limbs will appear differently, either more or less, as one or the other of these has the advantage; either on the western limb, from the first appearance of the new Moon to the full, or on the eastern limb, from the full to the latest time of being seen before the change. It need not be requested or pressed upon my readers, the observation of these variations in the different stages of the Moon's revolution, as well as at the full; convinced, as all must be, that these remarks must be sufficiently persuasive to render any special recommendation unnecessary to the class of readers, for whom it is my wish to exercise my utmost services. The comparatively small difference in these appearances of the eastern and western limbs of the Moon is usually called her libration, to denote the variation from her true balance, or regular and mean situation.

It has been observed, that the Earth is visible to little more than one half of the lunar inhabitants; and it must be equally obvious, that to those who are so situated as to behold it, the Earth will seem to be fixed, and without any circular motion, excepting what can only be produced by the Moon's libration. It must be no less manifest, that those who live

in the middle of the Moon's hemisphere will see the Earth directly over their heads, whilst those who live near the extremity of that hemisphere, will always perceive the Earth as a large Moon nearly in the horizon. In the course of a month also, the Earth will present all the phases or appearances of the Moon; but at times, and under appearances diametrically opposite. Nor can the least doubt be entertained that our Earth must appear to them to be variegated with spots of different magnitudes and colours, arising from oceans, seas, clouds, continents, islands, &c. as our Moon appears to us; but these spots of our Earth will appear to the inhabitants of the Moon to revolve about the Earth's axis so distinctly and plainly, that they will be at no loss to determine the nature and properties of the Earth's diurnal motion.

From the constant daily rotation of the Earth upon its axis to the east, all the stars and planets, as well as the Moon, will constantly appear to move every day to the westward. But the Moon's real motion, like the rest of the planets, is towards the east.—Nothing can be more plain. It is only to observe her on any particular night near some known fixed star, and on the following night she will be advanced to the eastward from about twelve to fourteen degrees, a little more or less, according as the Moon is in her apogee or perigee, and is slower or quicker in motion accordingly. By this means, she will accomplish her revolution in her orbit in the time, as already mentioned; but in a little more or less time, as the additional advance in her orbit to accomplish the same relative position with the Earth and Sun. should be near the part of her perigee, the new Moon will return sooner; if near the part of her apogee, it must of necessity be prolonged. 付

#### CHEMISTRY.

CHEMISTRY is that science which investigates and endeavours to ascertain the effect of the action of bodies upon each other, to determine their constituent principles, and to form new compounds. It is both a science and an art; for, it is both theoretical and practical.

The extensive utility of chemistry is shewn by its immediate connection with almost all the arts, in any degree subservient, not only to the comfort, but almost to the very subsistence of civilized life. The arts of dying, bleaching, tanning, glass making, the working of metals, &c. are entirely chemical. In agriculture, its use is very important, as it explains the phenomena of the growth and nourishment of vegetables, and the nature and action of manures, &c. The culinary art, the arts of baking, brewing, and distilling, owe much to chemistry.

In medicine, it affords invaluable assistance; and, in short, there is scarcely any art, trade, or manufacture, that does not depend either immediately, or shortly, upon a knowledge of this science. It also enlarges the mind, by affording us a more extensive and intimate knowledge of nature, and procures for us some of the most sublime pleasures and rational enjoyments.

Though many of the arts which owe their present state of perfection to chemical discoveries, were practised in the earliest ages, such as the art of working metals, making pottery, baking bread, making wines, &c. yet it is probable that most of these owed their origin to accident and necessity, and not to any scientific knowledge. It does not appear, from what remains to us of the writings of the ancient Greeks and Romans, that they ever had any correct ideas of chemistry; and the hordes of barbarians who overwhelmed the Roman empire, drove from Europe all the arts and sciences. Learning then took refuge among the Arabians, who being possessed of warm imaginations, attached to magic, and fond of the marvellous, eagerly cultivated alchemy, or the art of transmuting the base metals into gold. This happened about the commencement of the fourth century.

As this delusive dream of the imagination held out a

bait to avarice, it soon acquired a train of followers. Intoxicated with the idea of the boundless wealth that would reward success, no pains were spared to discover the *philosopher's stone*, whose touch was to change every thing into gold, and an universal medicine which should cure every disease, and give immortality to unbodied man. The research was pursued with an ardour which no disappointment would damp; and the mania spread from one country to another. The mischief occasioned by this delusion, at length excited the attention of many able and learned men, who took great pains to expose its fallacy, and check its progress.

Although the study of alchemy had been productive of much harm, by ruining most of its followers, yet the numberless experiments made by them have ultimately been productive of the greatest good to mankind. Though the immediate object was not accomplished of producing, by transmutation, yet a rich store of chemical facts was obtained, which were afterwards collected, arranged, and reduced to a science.

John Joachim Becher, who died in 1682, was the first who laid a foundation of a rational system of chemistry. His pupil, Stahl, simplified his doctrine, and advanced it still farther; he died in 1704. Since the death of these great men, chemistry has been assiduously and successfully cultivated; the name of Maargraaf, Scheele, Bergman, Beaume, Rouelle; and in our own country, Priestly, Black, and Cavendish, will be ever memorable in the annals of this science.

It was reserved for Lavoisier, a French chemist, who unfortunately fell a sacrifice in the late revolution, to overtuen the doctrine of phlogiston, which had been established by Stahl, and had been adopted by all the philosophers of Europe. In its room a new and beautiful theory has arisen; more simple, and probably much nearer to the truth: it is now universally received, and forms the system of which we intend to give a succinct account.

# Of the Chemical Effects of Heat, Expansion, Fusion, Fluidity, &c.

The phenomena of expansion, fluidity, boiling and evaporation, are entirely caused by the presence of fire or heat in bodies.

There are three forms under which matter can appear.

The first, comprehends solid bodies, as iron, &c.; the second, unelastic fluid bodies, as water, oil, spirit of wine, &c.; the third, elastic compressible fluids, as air. A cylinderical piece of iron when cold easily passes through a ring; but when heated red-hot it will not pass.

If spirit of wine is contained in an oblong vessel, and immersed in hot water, the spirit will be observed to rise like the mercury in a thermometer.

A bladder with a little air in it, when heated, will expand so as almost to burst; but, on removing it into the cold, it condenses and shrinks to its former state.

Rarer and lighter bodies expand more than the heavier and denser; but this proportion does not always exactly correspond to the respective density and rarity of matter; for metals expand more than glass.

As an exception to this doctrine it has been observed, that water suddenly swells in passing from a fluid to a solid state. Boyle took a brass tube, three inches diameter, and put some water into it; he then brought down into the tube a plug, with a weight placed at the head of it of seventy-four pounds, exposing the tube to the cold, and the water purging and expanding itself raised the seventy-four pounds.

The Florentine academicians filled a brass globe with water, closing the orifice by a well fitted screw, and immersed it in freezing water; but, as the sides were too thick, it did not burst. They then pared off such a quantity of the brass as left the sides of the globe unable to resist the expansion of the water; the force which was required to burst the

globe in this state was computed at 27,000lbs. Boyle says, the expansion of water in freezing is about an eighth or ninth of its bulk. The bursting of leaden pipes placed near or within the earth's surface proceed from the same cause. The pavement even suffers from the frost, which swells the earth and loosens the stones; nay, rocks have been known to burst in frosty weather. Frost is by some supposed to fertilize, by loosening the cohesion of the particles of earth.

As ice is never clear or transparent, and as we find several cavities in it, some have thought that the air insinuates itself, and in this way have endeavoured to account for expansion. But this has been refuted by water being frozen under an exhausted receiver, and the same cavities being found in the ice; the ice, indeed, instead of being heavier, was lighter, and floated on the water. M. Marraign has at length solved the difficulty. He says, the particles of water in freezing assume a different arrangement, are not in so close contact, and cut each other at angles of 60°. If this is the case, then, as indeed is now generally agreed, we cannot say with propriety that solid particles of water expand; but that from their chrystalization into the form of ice they require more room, occupying a greater space.

Denser bodies for the most part expand less than rarer; but this, it is to be observed, is not an invariable rule; for metals expand more than glass or stones. The expansion of metals was found a great obstruction to the regular going of clocks; but is obviated now by the ingenious contrivance of making use of two different metals, which do not expand equally, in constructing the pendulums.

As salts are observed in chrystalization to put on regular figures, it was thought, that the star-like appearance of snow was owing to a salt mixed with the water; but Maargraaff has proved, that snow is in fact composed of the purest water.

[ To be continued. ]

#### OBSERVATIONS ON HEALTH.

[Continued from p. 58.]

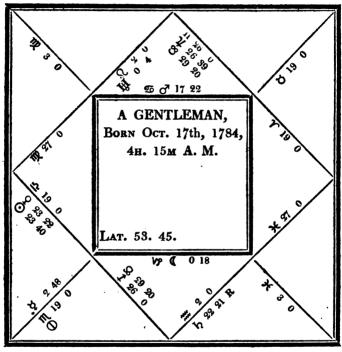
HAVING mentioned physical capacity and incapacity to enjoy health, I deemed it relevant and right to elucidate the subject with that candour and sincerity which, should I so much differ from others as to displease them, it is humbly presumed, is entitled to some respect and thanks, because my object is the benefit of society, and my observations the result of contemplation and experience of what but the elements is man exposed. How is it strange then, or as some say impossible, that the elements should operate upon him? Not only constitutionally but mentally. Who is there that either has not felt or heard others acknowledge the powerful impression made, both on mind and body, under certain states of the atmosphere? Do not such impressions result from the atmosphere?—and yet no tactile communication is visible between bodies so impressed by the atmosphere. No sophistry can remove the reality of this influence, or invent any other cause for the innumerable variations in the animal economy, not fairly and honestly imputable to ordinary sources of mental and bodily suffering.

The atmosphere so influencing the mind and body, must also be under the subjection of other powers from which it derives its influence; and I conceive these powers can be no other than the Sun and Moon. But the atmosphere is variable; sometimes salubrious, at other times noxious; and, I presume, the Sun possesses a particular property, viz. elementary fire dispensing light and heat; and the Moon also possesses a particular property, viz. radical moisture, and the admission and communication of the solar light.—But light, heat, and moisture, seem not calculated to disorder or derange the atmosphere, but rather to harmonize, cherish, and preserve, the elements. Hence, some other causes must prevail in the grand theatre of nature: and, therefore, I conceive that the planets and fixed stars interpose their influences, and

co-operate in answering the ends of creation. Thus, in the elementary world, as well as in the moral, nature appears in all her varieties and vicissitudes.

Acts to one end, but acts by various laws.—Pors.

[To be continued.]



LATITUDE OF THE PLANETS.

1. 138 s | 74 1 33 s | 7 1 0 n | 9 1 6 n | 9 0 20 s | 6 0 12 n | 140 32 n

HERE the Moon, in zodiacal parallel with Mars, and applying to the sextile ray of Mercury, indicates a mind keen, active, persevering, and well adapted for business; but an hasty temper, and manners not the most gentle. The Moon, being in mundane semi-quartile of Saturn, and so near the opposition of Jupiter, promises no extraordinary degree of domestic felicity. If the time be quite correct, the ascendant to the sesqui-quadrate of Saturn and the mun-

dane quartile of the Moon must have produced, about four years of age, and likewise about five or six, illness, or some personal affliction, accompanied with family troubles. About seventeen, the Sun to the quartile of Mars converse, and the Moon to the zodiacal opposition of Mars, shew a perplexing time with family troubles; but more so about twenty, or a little later, attended with enmities or discord from a female cause.

The mid-heaven to the biquintile of Saturn would, if the correct time of birth were four or five minutes earlier than the time specified, denote an entrance into business; and, in this case, the ascendant would arrive to the mundane trine of Saturn in the twenty-fourth year, a direction likely to produce journeys or travelling. The mid-heaven to the conjunction of Mars and the ascendant to his quartile, near twenty-six, exactly describe perplexity, loss, or robbery. The Moon to the quartile of Venus and the Sun in the zodiac, in the twenty-sixth year, shew injury and affliction.

The Sun and Venus in the second, in mundane trine to Jupiter, will give advancement, and success in obtaining money—yet the nativity denotes rather an anxious life: and about the age of thirty-four and thirty-seven, or thirty-eight, very great care will be required to guard against serious losses and perplexing reverses of fortune. About fifty-six and sixty-two, or sixty-three, the health will demand particular attention.

## REMARKS ON LORD NELSON'S NATIVITY.

[Continued from page 124.]

Prolemy, in his Quadripartite, Book III. Chap. XVIII. where he makes remarks on blemishes, hurts, and bodily diseases, directs us to observe the first, sixth, and seventh houses, chiefly the western angle for diseases; but the oriental horizon for hurts or accidents.

"These angles being taken, we ought to observe the malefic stars how they are configurated with them; for, if

both, or any one of the malefics, are, upon the ascending parts of the said angles, either bodily or by quartile, or by opposition, there will be on those that are born hurts and bodily diseases, chiefly if both the luminaries, or one of them, be angular after the manner before said."

The above rule holds good exactly in the nativity of the immortal hero; the Moon being one degree from the cusp of the tenth house, or in mundane quartile to the ascendant, and in exact mundane and zodiacal semi-quartile to Mercury, within seven degrees of the opposition of Saturn, which she is applying by converse motion; and soon after to the mundane quartile of Mars, who is but a few degrees above the ascendant, afflicted by the mundane quartile of Saturn and the sesqui-quadrate of the Georgium Sidus in the zodiac.

Mars is ascending into the twelfth house; the ascendant, unprotected by a single benefic ray, and afflicted by Mercury, being in exact semi-quartile to it. It is, therefore, manifest, conformably to the rules of Ptolemy, that this illustrious warrior would be particularly liable to accidents and bodily injuries: and even, according to the said rules, there are many indications of a violent death. Likewise, agreeably to the authority of very respectable writers, though less ancient, Mercury, being lord of the eighth house, afflicting the Moon, and the ascendant, affords the same testimonies.

The Moon in conjunction with Venus, ruler of the occidental angle, and located in the tenth house, denotes marriage; but being in Virgo, a barren sign, presents no genial prospects of a vital offspring.—The Moon applying to the sextile ray of Mars might probably influence the passions to an extraordinary attachment to some other person.

I shall just furthermore observe, that so many planets, in their essential dignities, particularly Jupiter in Sagittarius on the cusp of the second house, and in mundane trine to the Moon and mid-heaven, are irrefragable evidences of the illustrious hero being fortunate in getting riches; and this

testimony is corroborated by Mars having the dominion of the part of *fortune*, and strong in his own dignities; yet, on the other hand, seeing Mars afflicted by Saturn and Herschel, and rising into the twelfth house, his lordship could not be equally fortunate in keeping and accumulating money: in fact, what the *infortunes* give is generally of a precarious and wasteful nature, unless in friendly aspects with the benefics.—[Lord Nelson's Biography in our next.]

### To the Editors of the Monthly Correspondent.

GENTLEMEN,

I HAVE just time to say, that time will not permit me to do much for you this month, another may serve you effectually. I send you, however, another paradox or two.—

- 1. There are several planets, or wandering stars, which, at certain times, appear and disappear; whose light decreases as they come towards the south, and increases as they go from the south; and so transparent and thin, that the smallest stars can be seen through them. There are also others so opaque, that, in conjunction with the Sun, they appear as spots on his face; and the farther they are from us the bigger they are.
- 2. There are several planets said to be in conjunction with the Sun, not only when they appear to be in the same degree of their orbit with the Sun, but when they are in that degree of their orbit, diametrically opposite to the Sun.

LILLY, Jun.

#### APHORISMS BY PHILALETHES.

[Continued from page 108.]

In quo signo Luna est genituree tempore, illud in concæptuascendens; et in quo inventa fuit in concæptu, illud aut ejus oppositium ascendens in partu.

#### Thus translated:

The sign in which the Moon is in the genesis ascends at the conception; and the sign in which she was at conception ascends, or the opposite, at birth.

Signs.	Deg.	Days.	Days.	Remarks.
0	0	273	258	The middle column, under
0	12	274	259	Days, requires the distance of
0	24	275	260	the Moon from the ascendant,
1	6	276	261	at birth, to be taken, viz. when
1	18	277	262	she is under the Earth; but the
9	0	278	263	last column, under Days, re-
2 2 3 3	12	279	264	quires her distance from the
2.	24	280	265	western angle or seventh house
3	6	281	266	to be taken, viz. when she is
3	18	282	267	above the Earth, in signs, de-
4	0	283	268	grees, and minutes.
4 4 4 5	12	284	269	The column under Signs and
4	24	285	270	Degrees shews the number of
	6	286	271	days to be traced back from the
5	18	287	272	birth, according to the distance
6	0	288	273	of the Moon from the ascend-
				ant, if under the Earth; and
į .		This column	This column	
ľ		to be observed	to be observed	
Į.		when the	when the	The degrees and minutes are
		Moon is under	Moon is above	to be converted into hours, and
l'		the Earth.	the Earth.	added to the signs: suppose the

Moon be four signs from the ascendant, and located 4 degrees 30 minutes, which make nine hours to be added to the number of days in line with the figure 4—0, in the column under Signs and Degrees; and 283 will be found in the middle column, under Days, when the Moon is under the Earth, consequently we look back from the birth, 283, and nine hours for the time of conception.

The same rule holds good when she is above the Earth; observing the last column, appropriated to that position of the Moon, at birth.

This is a most interesting part of prognostic astronomy; and it is ar-dently hoped, that the attention (to which it is entitled) will be amply and copiously manifested for the attainment of Truth, the dignity of Science, and the real Benefit of human kind.

### THE SUMMER'S EVENING WALK.

THE EFFECTS OF THE SUBLIME AND BEAUTIFUL ON FEBLING MINDS. BY THE AUTHOR OF THE MANIAC.

[See our Second Number.]

- WHEN Hope, enchantress fair, Had snatch'd one short, enraptur'd hour from care ; Damon, and one he valued by his side Rang'd o'er the downs while bright in summer's pride.

Trode, with soft loitering steps, the purpled dale, And drank the spirit of the "sea-born gale;" Or scal'd the cliff, whose everlasting head Frowns in long shade o'er ocean's rocky bed. What time the orb of day, half lost to view, Wide o'er the deeps a crimson glory threw; Glow'd on the hills with fluctuating fires, And tipp'd with golden hues the distant spires .-'While mark'd with radiant gleams of parting light, All nature, smiling, charm'd their eager sight, The streams of Ouse, but little known to song, That glide in winding majesty along, Trembling with rosy splendours led their eyes To where the hoary towers of Lewes rise; Where Glynde, in rural verdure clad, was seen, The fairest village of the smiling green; And where, embosom'd in the peaceful vale, Firle's \* rising beauties woo the vernal gale. Be kind, thou gale of spring! ye genial showers, Spread your soft drops, and cheer its opening flowers; Thou summer's Sun, awake the impulse bland, That gives perfection to the planter's hand. Oh! deck the spot, where grace and beauty dwell, With living groves, that most in charms excel! Bid round the form, that bears an Angel's heart, Each fragrant bloom its grateful sweets impart; So may the gentle Fair, her bowers among, Still love to range, and still her stay prolong.

Thence turn'd they, where, in distance scarce reveal'd, Appear the woods that deck the fruitful weald; Around them, high in heaving concourse spread, Each sloping down uprear'd its verdant head; Where plenty, from her never-failing horn, Pours wealth, and clothes the hills with waving corn.

<sup>•</sup> Firle, the seat of Viscount Gage.

Light on their lofty forms in genial showers

Descend the dews that cheer their various flowers:

There, as to fold the tinkling sheep-bells rung,
Responsive to their sound the shepherd sung.

Through placid Heaven a soothing stillness reign'd

That every painful cast of thought restrain'd:

And gaily shone the furze, while fair and sweet

Bloom'd the low heath that smiling kiss'd their feet.

Thence, on the main, they turn'd their ravish'd sight,
Far in whose waters sunk the God of light:
Flush'd by whose beams, a thousand colours gay,
Danc'd on the bosom of the crescent bay:
Where, with proud ensigns, England's navy rode,
Or far in distance bore its dreadful load.
There humble barks, too, furl'd their silver sails,
That lightly flutter'd in the fainting gales.
Loud from the neighb'ring port (his labour done),
The weary sailor hail'd the setting Sun;
While in soft tones, that whisp'ring winds prolong,
The linnet charm'd them with his evening song.

How their rapt souls, while yet th' impassion'd sight. Dwelt on the glorious scene with fix'd delight; Heaven's starry cope sublime, enraptur'd trod, And sought the blaze that shrouds the secret God. HIM, they in joint, though silent, praise ador'd; HIM, who, on Earth, such heavenly glories pour'd; HIM, who, ere beings' morn or earth began, Doom'd man a friend to bless his fellow man; Then, drawn by Sympathy's attractive law. "Each talk'd of all he felt, and all he saw." From every kindling view, what subjects start Th' extatic dictates of the swelling heart! Divine philosophy inform'd each tongue, And to the harp of Reason sweetly sung; Whose music pregnant with inventive fire. Might seem the strain that wak'd the primal lyre;

The strain that angels sung, as bards suppose,
When the fair fabric of Creation rose:
And many a muse of yore, whose deathless lays,
By nature taught, arose to nature's praise,
Seem'd there in living majesty to shine,
As oft they breath'd the sweet impassion'd line!
While each, improv'd, his dear companion bless'd,
And the heart's rapture either tongue confess'd,
While social joy transfus'd each meeting soul,
And prov'd "how much " the half exceeds the whole."

These are the glories, that to man impart,
The truest, best, religion of the heart:
For while all beauteous in the sacred Sun,
HE sees the pride of human art outdone;
While its eternal source around prevails,
Rears the wild hills, and spreads the smiling vales;
Majestic stretches o'er the boundless seas,
And softly breathes in every passing breeze,
Clear to his conscious soul, the God confess'd,
His passion awes, and virtue rules his breast.

H

# To the Editor of the Monthly Correspondent. SIR.

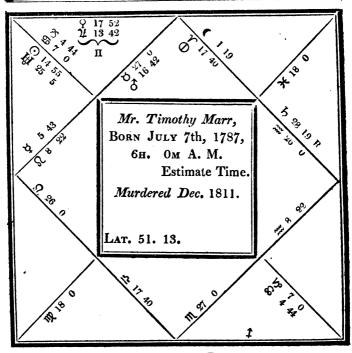
I HAVE sent you the Nativity of Mr. Timothy Marr, late of Ratcliff Highway, who was, with his family, barbarously murdered on the night between the 7th and 8th of December 1811. The time of birth was given me by their nearest surviving relatives; and I have no reason to doubt its being

<sup>\*</sup> This is a literal translation from Hesiod. The sentiment cannot apply, except in this and other similar cases. When two minds, attuned alike to harmony, enjoy together, whether the beauties of nature, the productions of art, or the charms of social conversation, like two strings in unison, which, when one is touched the other sounds responsively, each experiences the same sensation of pleasure that the other feels, as its own; and thus the satisfaction is doubled by being divided. Hence, it may be said, "The half exceeds the whole."

nearly correct, though, as the even hour only was noticed, it would not be unreasonable to suppose the correct moment of birth might have been a little sooner or later than the time given, which would not alter the face of the figure, nor the general judgment to be deduced from it, but would only make a difference in the *time* of death, with which it would agree exactly, by making it about a quarter of an hour later, as the ascendant would then come to the opposition of Saturn and the mundane quartile of Mars, and the Moon to the zodiacal quartile of Herschel, followed by the other evil directions at the time of death.

The testimonies of a violent death are numerous and striking: the Moon, who is giver of life, is in semi-quartile to Mars from violent signs, and is greatly afflicted by the mundane quartile of the Georgium Sidus from the twelfth house; and the Sun is in the twelfth in exact mundane semiquartile to Mars, and in zodiacal sextile to him, which is no good, as Mars is extremely vicious in Taurus, and powerful to do evil by being angular in the tenth; and the Sun being afflicted by the sesqui-quadrate of Saturn, who is in the house of death, evidently denote, that the termination of the native's existence would be desperately violent; and there is not a single benefic ray or aspect to be seen in the figure that could soften the evil; and the directions, which I conceive produced death, were of the most violent description-I consider it altogether a remarkable instance of the truth of astral influence. J. W.

If any of our Correspondents should possess the means of obtaining the nativity of the unhappy man who perpetrated this most inhuman deed, it would be highly beneficial to the cause of science; because, on comparing it with Mr. Marr's geniture, undoubtedly astral causes might be found pointing out these results as peculiar to these two natives.—ed.



LATITUDE OF THE PLANETS.

b 127 s | 4 0 35 s | 5 10 s | 9 10 s | 9 1 29 n | 6 5 15 n | H0 30 s

### BIOGRAPHY OF RICHARD SAVAGE.

[Continued from page 121.]

He now thought he had a right to enjoy the affluence of his mother; and therefore, without scruple, applied to her as her son, and made use of every art to awaken her tenderness and attract her regard. But neither his letters, nor the interposition of those friends which his merit or his distress procured him, made any impression on her mind; she still resolved to neglect, though she could no longer disown him.

Savage was, at the same time, so touched with the discovery of his real mother, that it was his frequent practice to walk, in the dark evenings, before her door, in hopes of see-

ing her as she might come by accident to the window, or cross her apartment, with a candle in her hand. But all his assiduity and tenderness were of no avail; he could neither soften her heart nor open her hand, and was reduced to the utmost miseries of want to turn author by profession\*.

In the year 1715, he offered to the stage a comedy, borrowed from a Spanish plot, which being refused by the players was given by him to Mr. Bullock, who brought it upon the stage, under the title of Woman's a Riddle, but allowed the unhappy author no part of the profit. Two years afterwards, in the 20th year of his age, he wrote, Love in a Veil, another comedy, but with little better success than before. It, however, procured him the acquaintance of Sir Richard Steele and Mr. Wilks; to the latter of whom calamity seldom complained without relief; and who took the unfortunate wit under his protection, not only assisted him in any casual distresses, but continued an equal and steady kindness to the time of his death. By his interposition, Mr. Savage once obtained from his mother fifty pounds, and a promise of £150 more; but it was his unhappy fate that few promises of any advantage to him were performed.

His constant attendance on Mr. Wilks procured him the acquaintance of the players, and among others, of Mrs. Oldfield, who was so much pleased with his conversation, that she allowed him a settled pension of fifty pounds a year, which was during her life regularly paid.

That this act of generosity may receive its due praise, and that the good actions of Mrs. Oldfield may not be sullied by her general character, it is proper to mention, that Mr. Savage often declared, in the strongest terms, that he never saw her alone, or in any other place than behind the scenes. At this lady's death Mr. Savage endeavoured to shew his

<sup>\*</sup> His first publication, called the Battle of the Pamphlets, was written against the bishop of Bangor, which he afterwards endeavoured to-suppress.

gratitude for her in the most decent manner by wearing mourning for her as a mother.

Previously to this his acquaintance with Sir R. Steele, whose dissipated habits, and consequent embarrassments, had made him a very unimproving example for his protogee at his entrance into life, had terminated. The kindness of Sir Richard did not consist in bestowing common favours. He proposed to have established Mr. Savage in some settled scheme of life, and to have contracted a kind of alliance with him, by marrying him to a natural daughter, on whom he intended to bestow a thousand pounds; but as he never was able to raise the sum proposed, the marriage was delayed. In the mean time he was officiously informed, that Mr. Savage had ridiculed him; by which he was so much exasperated, that he withdrew the allowance which he had paid him, and never afterwards admitted him to his house.

[ To be continued.]

# Review of Scientific Books.

Lunar Observations, denoting the Influence of the Moon on the Winds, by her Impulse on the Earth's Atmosphere, &c.—By Sol. G. Da Costa, pp. 51.

[Continued from p. 76.]

As it is the peculiar province we have assigned ourselves to investigate the appearance and properties of the luminaries and their starry train, we shall content ourselves with referring our readers to those different parts of our work appropriated for that purpose; particularly to the description of the Moon in the second and present numbers, which is the work of a gentleman of real science; who, by volunteering his aid to our pages, has stamped them with a value they might not otherwise have had.—The following quotation, however, while it fully describes the author's discovery, will not be unamusing, particularly to those who may wish to ascertain its veracity by experience.—

"In furtherance of the supreme will of the Almighty, an attendant luminary was provided for our Earth, which, although communicating no increase of heat, nor yet constant equality of light, should, by the laws of attraction and gravitation, give constant motion to the waters that cover the face of the earth, and the atmosphere that surrounds it. Hence arise

the ebbing and flowing of the sea, and the action of the winds. The former of these has been satisfactorily explained; but for the latter, no certain clue has as yet been afforded on which to found an equally satisfactory hypothesis. The mode by which this discovery is to be obtained is now offered to the scientific world, as the result of a very attentive observation of four years, of the corresponding state of the wind to the signs of the moon in her different variations of figure and position throughout each lunation; and that such signs as she may display at the change, but more particularly at the full, will be indicative of such winds as will prevail to the succeeding change: also to the return of the full, and even to the following change, as the signs may point out. To enable the observer to attest the truth of such indications, let him at the full, endeavour to take a fac-simile of the Moon, and note down the quarter of the wind at the The Moon at that period being south, on her right limb will be seen the guide to the winds, in what is commonly called the man in the Moon, although deficient in his upper limbs, and his head invisible; but if, at a more early period, say before the termination of the first quarter, ne is seen in an upright position, leaving, as the Moon advances to the full, a clear space on the right and left sides of his lower extremities, viz. more than half the Moon's diameter, descending a good deal below the line of dark spots on the east limb, so as to display, when at the full, and seen at midnight, a great proportion of such spots on his shoulders; observing, that as his lower extremities descend, the spots are brought more upwards, then westerly winds may be expected for nearly the whole period until the following full takes place: but, on the contrary, if the said spots appear to have increased on the Moon's right or west limb in any considerable degree, and the guide before described gradually rising to the top or south limb, so as to appear in an horizontal position when at the full, and the night after, then easterly winds may be expected to prevail nearly to the same length of duration as before pointed out for the westerly; and in the appearance of a nearly equal proportion in space between the guide and the spots, with his lower extremies parallel with the spots, there then may be expected twenty or twenty one days' westerly wind to occur before the next full; of which number, all, or part, will succeed each other at the beginning, or be divided at intervals: but in the latter view of the guide, he is seen to ascend at the full, or directly after to let the easterly winds (as described in the second position above stated) pass under him. It must be here mentioned, that as the guide varies his position more or less oblique, so do the spots increase and decrease in equal proportion, as do also the winds; but in those instances, when the guide is seen at the top without the usual appearance of the spots on the light or western limb of the Moon, the winds may be expected to be variable until the next full.

"The above predictions are conformable to innumerable observationss, compared with each other at the full. It will nevertheless be found, that notwithstanding the unerring indications in the signs, as above stated, the winds will sometimes vary for a few hours a day, or even for two days; but such changes are only transitory, and must be considered as veins and currents arising from the smoother and lighter parts intersecting the darker. When those veins and currents are expended, the wind, indicated by the most conspicuous feature, as is denoted to be the leading guide, will return conformably to the indication first pointed out. It is necessary to be clearly understood, that although the guide and spots, as above described, are the signs of observation, it is from the smoother or more shining spaces surrounding and intermixing with those spots that the winds are actually governed; and as the quantity of surface on the Moon's disk is filled up by the clearer spaces, sometimes above, and at other times below, the guide and spots; and at others, more or less, to the eastern or western side of them; so do the directions of the winds receive their impulses in strength and duration from the points before stated."

# JANUARY 1809.

M D	Place o			's tit.	14 lat		o lat		Q lat	's it.		's ti <b>t.</b>		y's lin.		L's lin.	gec Q	's lin.		's lin.	ğ dec	
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# AUGUST 1809.

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